



Research Analysis CA B U R F A U Montana Department of Labor and Industry

"MONTANA'S WORKFORCE INFORMATION CENTER"

www.ourfactsyourfuture.org

The Montana Department of Labor & Industry's

Labor Day Report 2008

Brian Schweitzer, Governor John Bohlinger, Lieutenant Governor

Montana Department of Labor and Industry Keith Kelly, Commissioner

Created by the
Research & Analysis Bureau
P.O. Box 1728
Helena, MT 59624-1728
(406) 444-2430
www.ourfactsyourfuture.org

Contributors: Commissioner Keith Kelly Barbara Wagner, Economist Aaron McNay, Economist

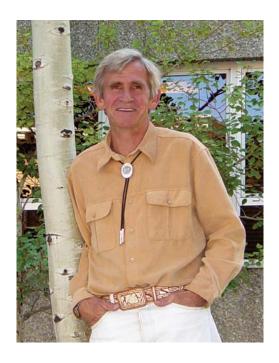
Table of Contents -

A Message from Commissioner Keith Kelly4
Labor Day Report Introduction
Employment Data Published by the Research and Analysis Bureau6
Part One: Overview of the Montana Economy by Aaron McNay, Economist7
Chart 1.1 - U.S. and MT Monthly Seasonally Adjusted Unemployment Rate: 1998-20087
Chart 1.2 - U.S. and Montana Change in Total Employment: 1997 - 20078
Chart 1.3 - State Employment Growth from January 2008 to July 2008 (CES Unadjusted) 8
Chart 1.4 - County Employment Growth from January 2008 to July 2008 (LAUS Unadjusted) 9
Chart 1.5 - U.S. and MT Change in Private Industry Employment: 2006 to 20079
Chart 1.6 - U.S. and MT Change in Annual Average Wages: 1997 to 200710
Chart 1.7 - U.S. and MT Change in Private Industry Wages: 2006 to 200710
Chart 1.8 - Change in Employment on Indian Reservations in Montana: 2006 to 2007 11
Chart 1.9 - Change in Wages on Indian Reservations in Montana: 2006 to 2007 12
Part Two: Montana Wage Growth by Barbara Wagner, Economist
Chart 2.1 - Inflation Adjusted Average Annual Wage in Montana: 2002 to 2007
Chart 2.2 -Wages and the Unemployment Rate in Montana: 1997 to 200714
Chart 2.3 - Percent Change in the Average Wage by Occupational Wage Category for Montana and the U.S.: 2002 to 2007
Chart 2.4 - Percent Increase in Employment by Occupational Wage Category for Montana and the U.S.: 2002 to 2007
Chart 2.5 - Projected Job Growth by Education and Training Category: 2006 to 2016
Chart 2.6 - Employment and Wage Growth by Industry: 2002 to 200717
Chart 2.7 - Wages and Labor Productivity in Montana: 2002 to 200718
Chart 2.8 - 2007 Average Salary by Education Category
Chart 2.9 - Wage Growth by Skill Category in Dollar Terms: 2002 to 200720
Chart 2.10 - Where to Find Workers?21
Chart 2.11 - Number of Registered Montana Apprentices
Chart 2.12 - Montana Department of Labor and Industry's Incumbent Worker Program 23

A Message from Commissioner Keith Kelly

As the commissioner of the Montana Department of Labor and Industry, it is my privilege to present the 2008 Labor Day Report to Governor Brian Schweitzer and to you, the citizens of Montana. By investing in people, we invest in Montana's economic future, and it is the hard-working men and women of our state that continue to move Montana forward and grow our economy. In this year's Labor Day Report, we focus on the growth in jobs and wages.

Montanans are earning more. In 2007, the average wage in Montana grew by an unprecedented 5.3% to \$32,223, largely due to increased worker productivity and strong job growth. In addition, the minimum wage increased from \$6.15 to \$6.25 per hour in January 2008, as required by state statute. It increased again in July when the federal minimum wage increased to \$6.55 per hour. As the minimum wage increases, so do the wages of other workers in order to maintain competency-based pay differences.



Montana's economy continues to stay strong while the national economy struggles. The tremendous job growth from recent years is continuing in 2008. In fact, Montana ranks third in the nation for job growth from January to July in 2008 for unadjusted payroll jobs, increasing employment from 434,400 to 457,500 - a 5.3% growth! Occupations requiring low and medium skilled workers are growing at a record pace. Despite the slight rise in the seasonal unemployment earlier this year, Montana has consistently maintained one of the lowest unemployment rates among the fifty states and remains substantially below the national average.

Some exciting new industries are also adding jobs and investments to Montana's economy. Clean energy developments, such as new windfarms, the Keystone Pipeline, and the new proposed coal to liquids plant on the Crow Reservation, promise to create new jobs and new opportunities for Montana's workers. And the mistakes of our past are now creating jobs for our future in the growing Restoration Industry, which works to clean up Montana's abandoned mines and Superfund sites to reclaim our state's natural beauty. These emerging industries, along with the new job growth from our existing industries, will require the workforce to have specialized training in new technologies and future developments. Businesses, educational institutions, and those of us who represent workers all need to work together to ensure today's workforce is trained for tomorrow's jobs. The Department of Labor and Industry is poised to help achieve this goal through worker training partnerships like the Incumbent Worker Program and Apprenticeship Program.

New opportunities also mean new challenges. This year's Labor Day Report will show you that Montana is on the move; we have an unprecedented opportunity to get our workforce ready for tomorrow's jobs. We must continue to invest in our most precious natural resource, our workers, in order to keep Montana moving forward.

Keith Kelly

Commissioner Department of Labor & Industry

Seith Selly

The Labor Day Report is an annual report published by the Research and Analysis Bureau, a part of the Montana Department of Labor and Industry's Workforce Services Division. This annual report presents an overview of economic conditions in Montana and provides insights into the Montana economy.

The Research and Analysis Bureau works in partnership with the Bureau of Labor Statistics to develop labor market information for Montana and the United States that businesses, educators, government agencies, researchers, students, and others find useful. In addition to developing and publishing monthly employment statistics, the Research and Analysis Bureau issues a number of other publications designed to help Montanans better understand their economy. The monthly Economy at a Glance newsletter provides updated employment data, along with an article focusing on an important aspect of the Montana economy. All of these publications are available on our website at www.ourfactsyourfuture.org.

The Research and Analysis Bureau also provides information to workers and students who are looking for new jobs or exploring new careers. Projected job growth by occupation and industry can help workers know which fields will provide employment opportunity in the future, while wage data helps them balance their interests and skills with the need to earn a living.

The Montana Career Resource Network (MCRN) is a component of the Research and Analysis Bureau that promotes career planning and development by providing publications and resources geared toward specific segments of the population. For example, "What to Pack: Getting Prepared for your Career Journey," helps middle school students take their first steps in career planning, while "Willing and Able" serves as a job hunting guide for Montanans with disabilities.

The Research and Analysis Bureau also conducts in-depth research on industries and the workforce in Montana. This fall, the Bureau will be completing a report on the Eastern Montana energy industry and their workforce needs to help businesses and workforce professionals identify and prepare workers for high demand occupations in the energy industry.

Also this fall, the Bureau will report the results of their latest Labor Availability Study, a comprehensive survey of the geographic location, skills and training levels, and future employment goals of Montana's workers.

The economists at the Research and Analysis Bureau have already started work to identify the economic impacts of the restoration economy in Montana. While we know that restoring our environment requires the help of many different workers, these workers are usually not categorized in a single industry, making it difficult to determine the economic impact of restoration projects. The Bureau's research will attempt to identify the number of construction

workers, scientists, bookkeepers, and other workers that are a part of Montana's restoration economy.

Early next year, the Research and Analysis Bureau plans on releasing its study on educational attainment and workforce outcomes in Montana, a comprehensive look at the linkages between education and successful employment in Montana. In addition to isolating the returns to education, this report will provide information on the skill levels of our future workforce.

Please visit our website for more information on these and other exciting products from the Research and Analysis Bureau.

Employment Data Published by the Research and Analysis Bureau

The Local Area Unemployment Statistics (LAUS)

provide the most recent unemployment rates and job growth information for the state and for each of Montana's counties. The LAUS employment measure includes an estimate of the number of self-employed and agricultural workers.

The Current Employment Statistics (CES) is

the most up-to-date information on industry payroll employment in Montana. Although this data series does not include agricultural, non-payroll jobs, it is the best indicator of current changes in employment in each of Montana's industries.

The Quarterly Census of Employment and

Wages (QCEW) provides both employment and wage information for the state and for each of Montana's counties. Because all employers that are covered by the Unemployment Insurance program are required to report employment and wages for this survey, the QCEW data is

considered the most accurate count of payroll employment. However, it does not include agricultural or self-employed workers and does not provide current month employment information.

The Occupational Employment Statistics (OES) is

a survey of businesses that records employment and wages for each occupation. This survey provides information on the occupations needed by each industry and helps determine how occupational pay differs across industries. The OES also includes estimates on the pay ranges of workers, such as the average starting salary and the average experienced salary, for each occupation.

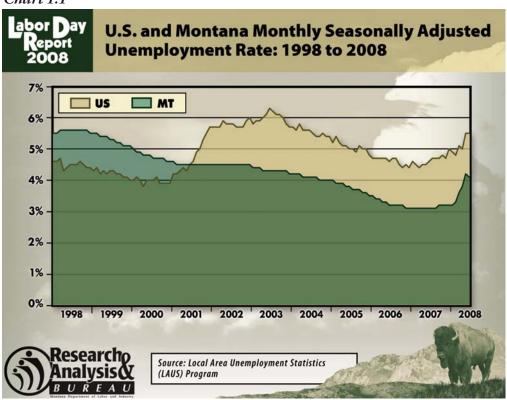
The Research and Analysis Bureau also collects data on **Occupational Injuries and Illnesses** and investigates the causes of **Fatal Occupational Injuries**. This data is published annually by the Bureau and is available on our website.

Part One: Overview of the Montana Economy

Aaron McNay, Economist Montana's economy has continued to exhibit strong performance and growth, despite the current national economic uncertainty. Montana's seasonally adjusted unemployment rate has continued to remain significantly below the rest of the nation (Chart 1.1). In July, Montana ranked 9th lowest in the nation for unemployment, with a rate of 4%.

Recent data indicate that Montana's unemployment rate may be stabilizing from the increases since the start of the year. From May to July, Montana's unemployment rate declined from 4.2% to 4%, while the national unemployment rate increased from 5.5% to 5.7%.

Chart 1.1





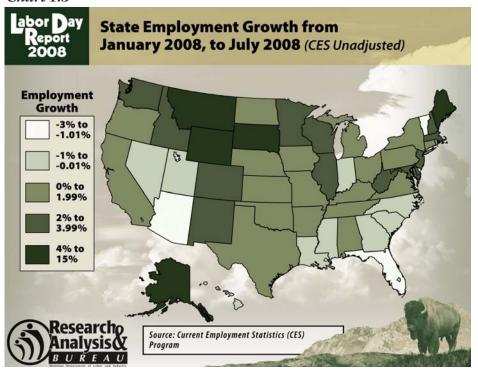
Montana's economy has also outperformed the nation in terms of employment growth (Chart 1.2). Over the 1997-2007 time period, employment in Montana grew at an annual compounding growth rate of 2.1% compared to a national rate of only 1.1%. Job growth in Montana has been speeding up in recent years. Employment grew at a compounding rate of 2.4% annually over 2002-2007, then at a compounding rate of 2.8% annually from 2005-2007.

Chart 1.2 abor Day **U.S. and Montana Change in Total Employment:** 1997 to 2007 2008 3.5% US MT MT 3.0% 2.5% 2.0% 1.5% 1.0% 0.5% 0% -0.5% -1.0% -1.5% 1998 1999 2001 2002 2003 2004 2005 Researcho

Source: Quarterly Census of Employment and

Wages (QCEW) Program

Chart 1.3



\nalysis\

The job growth continues in 2008 despite national economic instability; employment in Montana has increased 5.3% from January to July in 2008, making Montana the 3rd fastest growing state in the country (Chart 1.3).

Part One: Overview of the Montana Economy

However, the strong employment growth is not evenly spread across all of Montana. Employment growth is the strongest in Western Montana, with the fastest growth occurring around Gallatin and Flathead counties (Chart 1.4). Central Montana has witnessed low employment growth, while some counties have even experienced declines in employment.

Historically, Montana's jobs have been concentrated in agriculture, natural resources, and the manufacturing of value-added products from these two industries. While

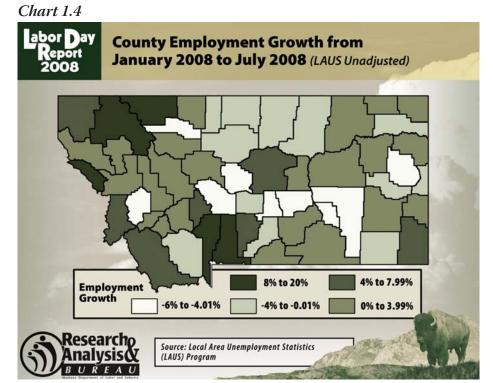
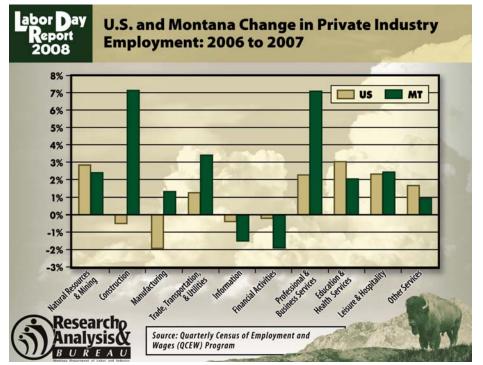


Chart 1.5



those areas are still a major part of Montana's economy, other areas have seen rapid growth in employment. Montana's fastest growing sectors over the last year in terms of employment have been the Professional and **Business Services**, and Construction sectors (Chart 1.5). Employment in these two sectors grew by 7.1% over 2006-2007. Montana has thus far been successful in avoiding many of the housing and mortgage problems experienced nationally, which has allowed the construction industry to maintain strong employment growth over the last year.



Natural Resources and Mining, and Manufacturing – two of Montana's highest paying industries – also enjoyed strong growth in employment during the last year. Only the Information and Financial Activities industries experienced a decline in employment over 2006-2007. The Information sector has been declining historically, while the decline in employment in Financial Activities is likely due to national problems in the financial industry.

Montana has outpaced the rest of the nation in wage growth since 2005 (Chart 1.6). In the last year, the annual average wage in Montana grew at 5.3% compared to a national growth rate of 4.5%. All of Montana's private industries enjoyed strong wage growth from 2006 to 2007 (Chart 1.7). Construction led all industries in wage growth, increasing by over 7.6%. Wages in the lowest paying sector in the Montana economy, Leisure and Hospitality, increased by 7.1% (or by \$887) over the last year. Average wages in Montana's highest paying sector, Natural Resources and Mining, grew by 3.7% (or by \$1,894), reaching nearly \$53,000 in 2007. The sector with the slowest growth was the Information sector, with wages growing at only 2.8% due to declining employment in that industry.

Chart 1.6

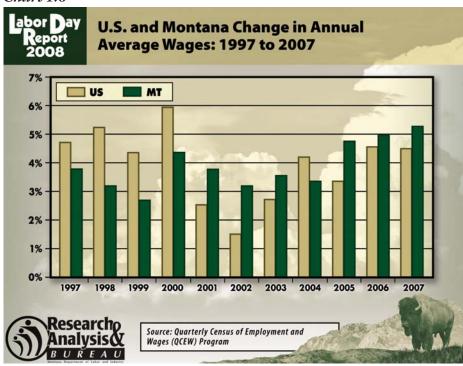
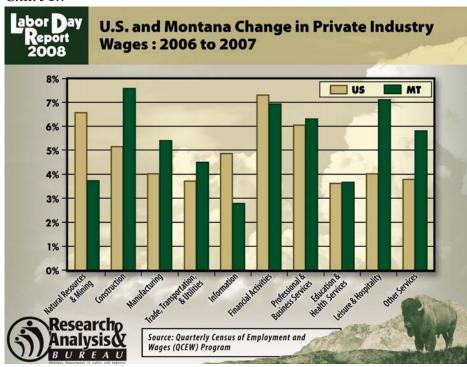
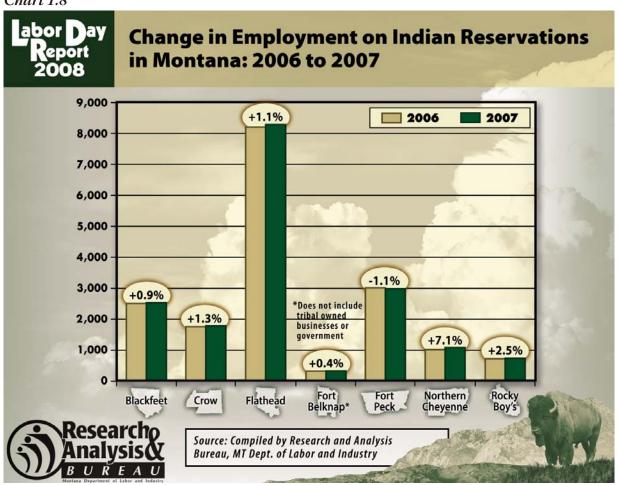


Chart 1.7



Although the seven Indian reservations across Montana continue to experience a significantly higher rate of unemployment than the rest of the state, these reservations are benefiting from Montana's strong economic performance. All but one of Montana's reservations experienced positive employment growth from 2006 to 2007 (Chart 1.8). Growth was the strongest on the Northern Cheyenne Reservation, where employment grew by 7.1% (73 new jobs). Fort Peck Reservation is the only reservation that experienced employment decline. For a more detailed look at reservation employment and the Little Shell Tribe, see the Reservation Fliers at www.ourfactsyourfuture.org.

Chart 1.8

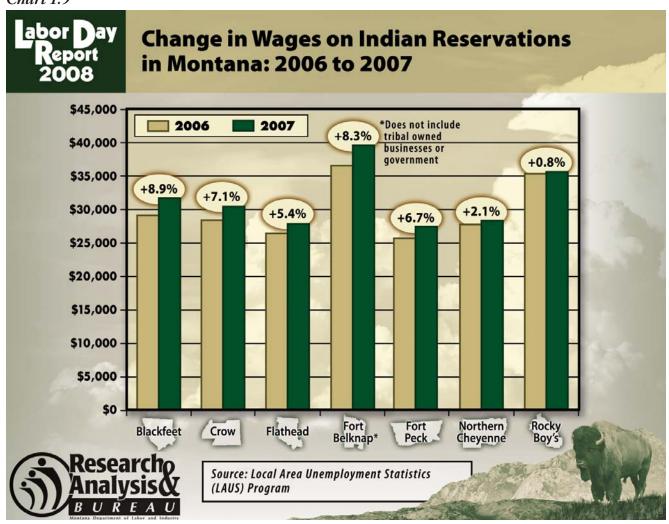






All of Montana's reservations experienced positive wage growth, with five of the seven reservations experiencing faster wage growth than the rest of the state (Chart 1.9). In dollar terms, the Fort Belknap Reservation had the largest increase in average wages at \$3,000; Fort Belknap has the highest average wage of any reservation in Montana. The fastest growth in wages was experienced on the Blackfeet Reservation, with wages growing nearly 9% from 2006 to 2007. The average wage on reservations in 2007 was only about 91% of the statewide average wage at \$29,239. In 2006, reservation wages were 90% of the statewide average.

Chart 1.9

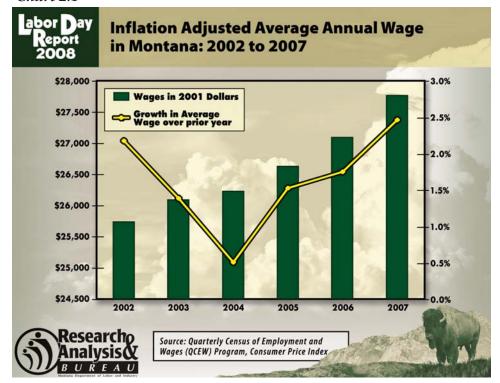


Part Two: Montana Wage Growth

Making the Case for Increased Worker Training

Barbara Wagner, Economist Average wages in Montana have been on the rise, outpacing both inflation and the national average since 2005. Chart 2.1 shows the average annual real wage in Montana, or the average annual wage adjusted for inflation, using the Consumer Price Index for smaller cities. Increasing real wages are good news for workers and businesses alike. Workers can increase their standard of living, while businesses benefit because workers have more money to buy goods and services. However, there is no denying that a few businesses struggle to pay for rising labor costs, particularly in the short-term before the positive impact of increased consumer spending can occur. Worker training can help businesses mitigate wage increases by improving worker productivity and by attracting and retaining workers.

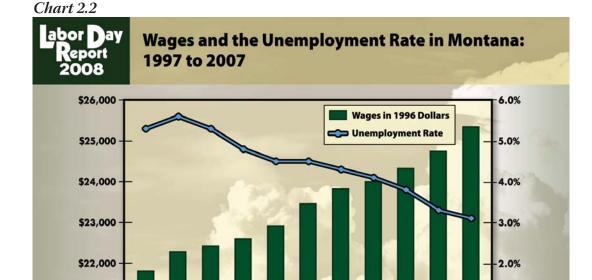
Chart 2.1



Basically, there are three different ways that wages in Montana can be increased – through increases in the minimum wage, increased job growth resulting in tight labor markets, or by increasing the productivity of workers through increased worker training and education. Of these, only increasing productivity is guaranteed to provide all businesses with the increased resources necessary to cope with rapidly rising wages.

The minimum wage in Montana has increased three times in the last decade, all within the last two years. The statutory minimum





wage increased from \$5.15 to \$6.15 per hour in January 2007, to \$6.25 per hour in January 2008, and, most recently, to \$6.55 per hour in July 2008. An estimated 15,526 Montana workers, or 5.4% of the workforce, received hourly wages less than \$6.55 per hour in 2007 and received higher wages due to the 2008 minimum wage increase. Minimum wage workers impacted by the wage increase tend to be young workers, employed in the accommodations and food service industry, and living away from populated areas. The recent wage growth is not due to minimum wage increases, however, as these changes only occurred in 2007.

\$21,000

1999

2000 2001

Statistics (LAUS) Program

Source: Quarterly Census of Employment and Wages (QCEW) Program, Local Area Unemployment

2002 2003 2004 2005

The credit for the recent wage growth belongs to strong economic growth and to Montana's workers, who have increased their productivity in recent years. Economic theory indicates that wages will increase when the labor market tightens, or when the demand for labor (or job growth) outpaces the supply of labor (growth in the labor force). In other words, as the unemployment rate decreases, wages increase. Chart 2.2 illustrates the clear correlation between the unemployment rate and real wages in Montana.

1.0%

2006 2007

The effect of job growth on wages is also evident when examining the growth in jobs by worker skill category. Chart 2.3 and 2.4 divide the Montana workforce into four skill categories based on occupational wages in 2002. Because low-skilled workers receive the lowest wages, we can safely use wage quartiles as a proxy for skill of worker. Occupations that are lowand medium-low skill were the fastest growing in terms of employment in Montana over 2002-2007. These two skill categories also had the fastest growing wages, as shown in Chart 2.4, consistent with economic theory.

Chart 2.3

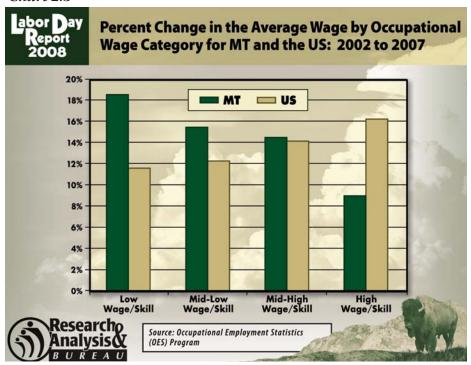
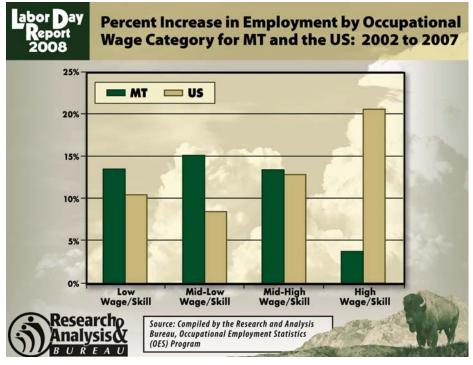


Chart 2.4





Due to the high demand and wage growth for low- and medium-skill labor, businesses with a high percentage of workers in these categories may have had a difficult time in recent years finding workers and keeping up with the fast wage growth. With the high demand for low- and medium-skilled workers expected to continue in the future, businesses will need to identify new ways to attract and retain workers. Chart 2.5 shows the projected growth in employment by education and training category for 2006-2016. Jobs that require only short-to-moderate term job training are expected to grow by over 20% over the ten-year period, adding approximately 5,500 jobs to the Montana economy each year. In comparison, jobs requiring a bachelor's degree are only expected to add 998 new jobs annually, while those requiring an associate's degree or vocational award are expected to add 820 jobs each year.

Chart 2.5

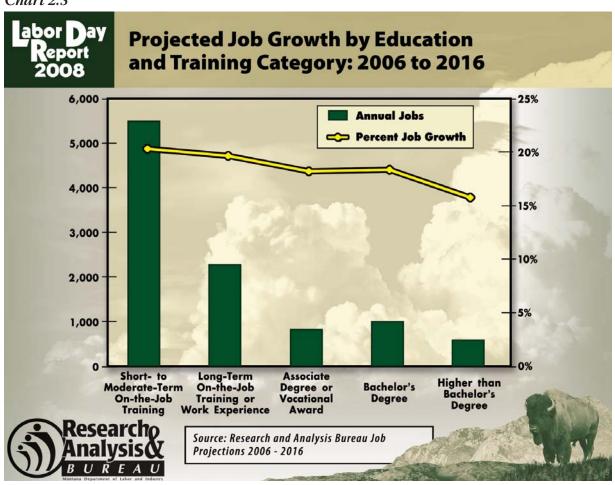
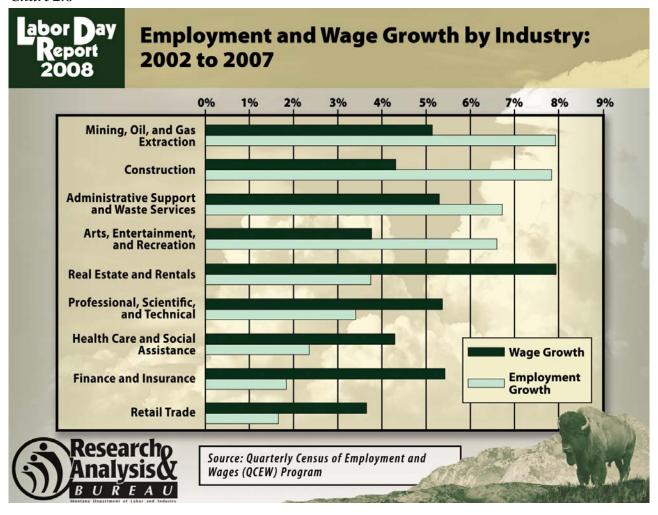


Chart 2.6



Rapid job growth goes a long way in explaining recent wage growth, but it does not present the full picture. For example, Chart 2.6 compares wage and job growth in Montana by industry. Mining and oil and gas extraction was the fastest growing industry in percentage growth, followed by construction. Administrative support and waste services, which includes the remediation and mine cleanup industry, was the third fastest growing industry. However, these industries did not have the fastest growing wage. Instead, real estate and finance lead the industries in wage increases, despite their slower employment growth. Tightening labor markets are not a full explanation for Montana's wage growth.





The missing piece to the wage growth puzzle is labor productivity. Economic theory indicates that workers will receive increased wages with increases in labor productivity. Improvements in labor productivity also benefit businesses because it results in increased output, and therefore increased sales. Chart 2.7 illustrates this relationship using real state GDP per worker as a measure of labor productivity. As real state GDP per worker increases, wages also increase. The relationship is not exact, however, partially because using state GDP per worker as a measure of labor productivity also includes productivity increases that result from improvements in technology and equipment.

Chart 2.7

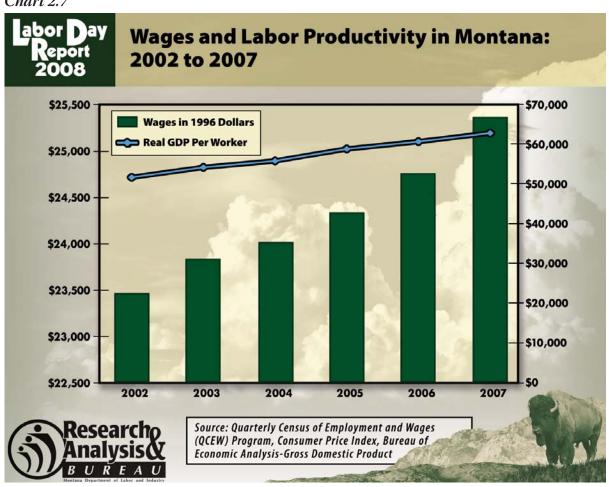
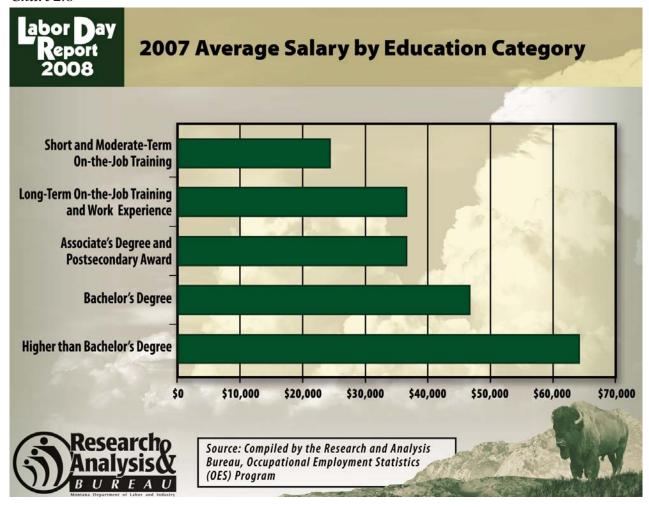


Chart 2.8

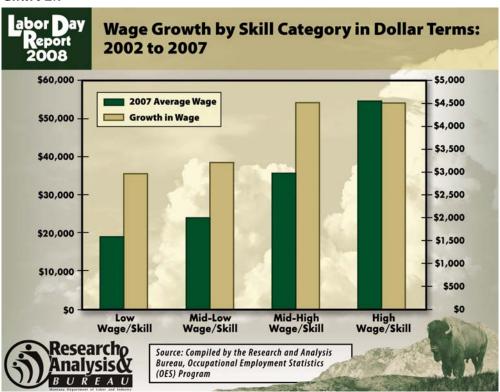


The positive correlation between labor productivity and wages is also evident in the returns to higher education and training, as shown in Chart 2.8. Workers with higher education and/or experience receive higher wages because they typically possess higher technical skills that lead to greater productivity and contribute more to economic output. In 2007, workers with a bachelor's degree earned an average salary of \$46,722. Workers with an associates or a postsecondary award earned approximately \$10,000 less, with an average salary of \$36,606. Increased education and training is a sure way to increase the wages of workers.



In fact, despite tighter labor markets and faster wage growth, wage increases over the 2002-2007 period were greater for workers with a higher level of education and training. Chart 2.9 shows the average 2007 wage by skill category on the left axis and the dollar value of the 2002-2007 wage increase on the right axis. Wages for low- and medium-skilled workers were the fastest growing (see Chart 2.4), but high-skilled workers received the largest increases in dollar terms. For example, the 18.5% wage increase for low-skilled workers during 2002-2007 was only \$2,961, resulting in an average wage for low-skilled workers of \$18,941. In comparison, high-skilled workers' wages increased by only 9%, but that increase was equal to \$4,507 and resulted in an average wage for high-skilled workers of \$54,599 in 2007.

Chart 2.9



A strong economy and increased worker productivity both help to explain Montana's wage increases in the past few years. While rising wages benefit both businesses and workers alike, many businesses have an easier time managing wage increases from labor productivity than from a tightening labor market. Labor productivity increases result in more output per worker, providing the business with additional income to distribute in wages. In a tightening labor market, businesses must invest significant time and effort in recruiting and retaining workers.

With the high demand for low- and medium-skilled workers expected to continue in the future, businesses need to identify new ways to mitigate tight labor markets. Businesses may realize benefits from recruiting workers from under-utilized labor pools. Chart 2.10 lists some available labor pools in Montana that could be accessed by businesses to meet the demand for more low- and medium-skilled workers. However, businesses may need to offer alternative workplace practices (such as flexible scheduling or providing transportation) to attract these workers. Further, many of these workers will require additional training before they can fulfill their full job responsibilities.

Commitment to worker training will pay dividends for businesses looking to increase wages while improving productivity. Worker training can help recruit new workers that may not yet possess the full skill set necessary, and can also help retain existing workers by providing them with new job challenges and opportunities for career advancement. **Business-government** partnerships provide one avenue for

Where to Find Workers?

Where to Find Workers?

Workers from Declining Industries

Populations with Lower Workforce
Participation

Women with small children

Workers over 65

Young workers

Non-High School Completers

Minority Populations (American Indian)

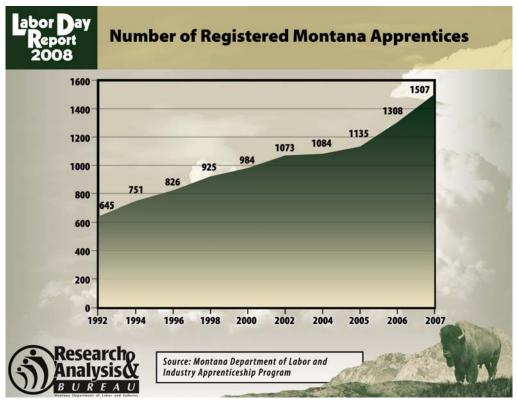
Ex-offenders

Researcho
Analysis & B U R E A U

businesses to address their worker training needs. Programs such as those offered by the Montana Department of Labor and Industry help businesses and workers keep pace with rapidly changing technology and workplace environments. Additionally, this more-educated workforce can help foster economic growth through innovation and knowledge spillovers.



Chart 2.11



For example, the Montana Apprenticeship Program provides assistance to employers looking to set up an apprenticeship program that would help workers receive on-the-job training in the construction, utility, and service trades. Apprentices are required to receive 144 hours of classroom and correspondence study to provide training on the theoretical and technical aspects of their trade. Apprentices receive wage increases of five to ten percent every six months if they successfully complete the requirements of their apprenticeship. Chart 2.11 shows the number of apprentices participating in the Montana Department of Labor Apprenticeship program from 1992-2007. The apprenticeship program has grown rapidly in recent years to address the fast pace of job growth for apprenticeable jobs in Montana.

The apprenticeship program has been very successful in helping businesses retain workers. In fact, 85% of apprentices that have completed the program since 1997 are still working in Montana. The apprenticeship program also helps workers move up the career ladder and achieve higher wages; the average pay rate for apprentices that successfully become journeymen ranges from \$22.00 to \$40.00 per hour.

Part Two: Montana Wage Growth

In addition, the Montana Department of Labor and Industry's incumbent worker pilot program provides cost-sharing for small businesses to provide additional training to their existing employees in order to improve their productivity and address skill deficiencies. The pilot program has already provided training to 338 employees at 105 Montana businesses who have increased their skill levels at an average cost of only \$722 per employee. Workers have been trained in many different industries, including the transportation, healthcare, computer, and manufacturing fields.

Chart 2.12



Montana's strong wage growth is expected to continue as the minimum wage increases, job growth continues, and the aging workforce retires. Wage increases above the rate of inflation will generally benefit Montana's workers and businesses alike, as workers increase their standard of living by buying more goods and services. Businesses, however, will also face challenges in balancing workforce needs against rapid wage growth. A commitment to worker training by government, businesses, and workers themselves can help industry and our workforce prepare for future workforce demands.





P.O. Box 1728 Helena, MT 59624-1728 Ph: (406) 444-2430 or (800) 541-3904

www.ourfactsyourfuture.org

500 copies of this public document were published at an estimated cost of \$3.21 per copy, for a total cost of \$1,603.00, which includes \$1,603.00 for printing and \$0.00 for distribution.